



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,389	09/28/2005	Michael Bauer	2732-168	6518
6449 7590 01/27/2010 ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005				
EXAMINER				
DICUS, TAMRA				
ART UNIT		PAPER NUMBER		
1794				
NOTIFICATION DATE		DELIVERY MODE		
01/27/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

Office Action Summary

Application No.

10/531,389

Applicant(s)

BAUER ET AL.

Examiner

TAMRA L. DICUS

Art Unit

1794

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-15 is/are pending in the application.
- 4a) Of the above claim(s) 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The RCE is acknowledged.

The prior rejections are withdrawn.

The Applicant's remarks are considered moot in view of the new ground(s) of rejection.

Election/Restrictions

Applicant's election with traverse of the foil in the reply filed on 08/19/09 is acknowledged. The traversal is on the ground(s) that foil means film. It is of record the similarities of foil and film that Applicant argued and therefore the species election between said two terms have been removed.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-10 and 12-15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 8-27 of US 7357077 and over claims 1-24 of US 20080290647 (the corresponding application 11/979107 is now patented, yet to receive a number), both to Adamczyk in view of US 3,897,964 (Oka et al).

Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims contain tactile perceptible print, however, the patented claims have embossed and intaglio printed areas and thus are the same to the touch. The patented claims are absent a foil with gaps applied to the carrier. However, Oka teaches in FIG. 4 and 7 a transparent resin surface cover 7, made discontinuous and partial by holes 4, thereby creating a window or gap, and the film and foil 7 covers and protects a colored layer 2 is formed by applying, printing or drawing a paint or ink composition having a resin and coloring agent as main components on any card base material 1, for example, by such ordinary painting process as a ordinary printing process as a gravure printing system, and relief (raised relief). Re claim 13: While Oka does not specifically use a PET material for the cover layer, Oka does teach polyester series resin, which PET is, for the base material and generally teaches the cover layer to be any transparent resin, (see 4:10-30), it would have been obvious to use the specific resin material for the cover. See at least Abstract, and col. 3. it would have been obvious to use the specific resin

material for the cover over the relief print to protect it and still enable feel as the gaps make it so.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 9-10, 12, and 14-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over (US 6060143 A) Topkin.

Topkin teaches a data carrier (shown in FIGs. 2, 5, 7, 9, and 11-12 and associated text) comprising a discontinuous cover layer 9 (reflective material and thus considered a foil) creating windows (gap) covering microscopically fine

(embraces ranges of 5-100 or 500 microns) relief structure 15 in part and the relief is on a carrier (3). Note at least two relief structure areas are taught. See at least Abstract, 3:45-68, cols. 8 and 9, and 6:10-20 to embossing features, and patented claims 1-17. Topkin does not explicitly show a print layer but teaches a print layer, covers the relief in order to avoid undesired, visually perceptible diffraction effects at the relief structures 15. See 4:25-30.

Thus the areas where and where not are printed and embossed are tactilely perceptible. See also 4:20-45, 6:15-50. Claims 1-6, 9-10, 12, and 14-15 are clearly anticipated.

In the alternative, if said relief structure is not tactilely perceptible, then it would have been obvious to form them as such because they are imprinted.

Re claim 1, Product-by-process claims are not limited to the manipulations of the recited steps (i.e. intaglio printing), only the structure implied by the steps. Patentability of an article depends on the article itself and not the method used to produce it (see MPEP 2113). Furthermore, the invention defined by a product-by-process invention is a product NOT a process. *In re Bridgeford*, 357 F. 2d 679. It is the patentability of the product claimed and NOT of the recited process steps which must be established. *In re Brown*, 459 F. 2d 531. Both Applicant's and prior art reference's product are the same.

Claims 1-6, 8-10, 12, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US 6060143) to Topkin in view of Ichikawa (US 3980018 A) or alternatively in view of Johnson (US 5915731 A).

Topkin, as set forth above essentially teaches the claimed invention. In the event that the process limitations prove to structurally differ from Topkin, the following rejection is applied.

While not explicitly teaching intaglio printing or tactile perceptibility of the printed relief layers or its thickness, the following prior art teaches such advantages.

Ichikawa teaches an intaglio printing process where thick ink is on relief patterns on a roll to print or engrave (by assembly of fine cell components and thus teach a micrometer range like that of Applicant) complicated figures, letters and patterns and engraved (embraces claims 9 and 12, fine patterns and guilloches) and (ink is wiped off, and thus is blind embossed, such teaching embraces blind embossing of claim 2) to thereby attain effective prevention of forgery or counterfeiting. Printing is on a substrate of paper for example production of bank notes, postage stamps, bonds and securities. See at least Abstract, col. 3-4, patented claims 1-2.

Johnson teaches embossing and intaglio printing techniques where embossing or engraving preferably comprises a regular matrix of embossed lines or dots or the like which together define the image. The embossed image

may include one or more embossings deeper than other embossings and/or it may include embossed lines or series of dots extending at different angles to each other. Johnson explains this type of process has several advantages: it enables thick film weights of special inks to be used; it provides a high resolution of print; the feel (embraces tactile perceptibility) of the finished document is improved because of the ink printing and embossing; and the process is very hard to simulate and because the machine itself is only sold to security printers. See at least Abstract, 1:45-68, cols. 2-3, 4:45-68, and col. 5.

While not teaching an exact height or range, it is obvious to shape or size it also dependent upon how much concealing is desired. It is submitted the optimal and/or claimed values of the respective material would have been obvious to the skilled artisan at the time the invention is made since it has long being held that such discovery, such as an optimum value of the respective result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272,205 USPQ 215(CCPA 1980). See also MPEP § 2144.05 II (B). Analysis of whether the subject matter of a claim would have been obvious need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ. *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1740-741, 82 USPQ2d 1385, 1396 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336-37 (Fed. Cir. 2006)). Motivation need not be found in the references sought to be combined,

but may be found in any number of sources, including common knowledge, the prior art as a whole, or the nature of the problem itself. *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

It would have been obvious to one having ordinary skill in the art to have modified the security of Topkin by including intaglio printing to alter the height of the ink and range to effectively conceal the underlying relief as suggested by Topkin and taught by both Ichikawa and Jonhson to effect the thickness and thus feel aiding in security measures as cited above. It would have been obvious to one having ordinary skill in the art to have modified the security of Topkin by including embossed areas and greater print areas as well being that the combination teaches such areas area modified to affect the amount of security.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN (US 6060143 A) to Topkin in view of Ichikawa (US 3980018 A) or alternatively in view of Johnson (US 5915731 A), as applied to claim 1 above, and further in view of US 6,474,695 to Schneider et al.

The combination is set forth above.

While not explicitly stating holographic embossed structures" security features, claim 7.

Schneider teaches security bank notes and ID (identity) cards having optically effective structures such as embossed holograms or diffraction or relief structures to affect the different viewing angles and coloring. See 3:25-41, 4:1-55, col. 6 and col. 11.

It would have been obvious to one having ordinary skill in the art to have modified the combination to include holograms or surface reliefs as claimed because Schneider teaches it adds to differing angles and coloring of a security as cited above.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN (US 6060143 A) to Topkin in view of Ichikawa (US 3980018 A) or alternatively in view of Johnson (US 5915731 A), as applied to claim 1 above, and further in view of (US 5433807) Heckenkamp et al. or (US 4715623) Roule et al.

The combination above does not expressly state the embossing areas are blind-embossed-Claim 2.

Heckenkamp teaches a variety of such embossing techniques combined with relief patterns for security. At 4:1-35 Heckenkamp teaches, it is also possible to provide reliable protection against forgery for embossed structures on papers of value, such as the blind embossed characters, patterns, signets. See at least Abstract, and col. 8.

Roule teaches unlinked areas of intaglio plates (is otherwise known as blind embossing) to provide contrast and concealed identifier to a paper. See at least Abstract, and cols. 1-2.

It would have been obvious to one having ordinary skill in the art to have modified the combination to include blind embossed areas because Heckenkamp and Roule teach they add further depths of security as cited above.

Claims 1-10 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US 3897964) Oka et al. in view of (US 4325196) Gauch et al.

Oka teaches in FIG. 4 and 7 a transparent resin surface cover 7, made discontinuous and partial by holes 4, thereby creating a window or gap, and the film and foil 7 covers and protects a colored layer 2 is formed by applying, printing or drawing a paint or ink composition having a resin and coloring agent as main components on any card base material 1, for example, by such ordinary painting process as a ordinary printing process as a gravure printing system, and relief (raised relief). Re claim 13: While Oka does not specifically use a PET material for the cover layer, Oka does teach polyester series resin, which PET is, for the base material and generally teaches the cover layer to be any transparent resin, (see 4:10-30), it would have been obvious to use the specific resin material for the cover. See at least Abstract, and col. 3

Oka doesn't teach the relief is tactilely perceptible (claim 1 and 14) or contain blind embossed area (claim 2).

Gauch teaches an identification substrate of paper or film comprising very fine line patterns printed in a relief print (embraces all types of the instantly claimed patterns and ranges-see rationale above) where it has a clearly visible and feelable (embraces tactile perceptible) relief effect with intaglio printing, that its structure is largely preserved after the lamination step. See at least Abstract, and col. 3.

It would have been obvious to one having ordinary skill in the art to have modified Oka to include tactile relief and blind embossed areas because Gauch teaches they add further depths of security as cited above.

Regarding the differences in thickness and ranges, see rationale above.
Claims 1-10 and 12-15 are addressed.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 3897964 A Oka et al. in view of US 4325196 A Gauch et al., as applied to claim 1 above, and further in view of Ichikawa (US 3980018 A) or alternatively in view of Johnson (US 5915731).

The combination is set forth above.

The combination does not explicitly teach the greater comparison as per claim 5.

The teachings of Ichikawa and Johnson are discussed above.

It would have been obvious to one having ordinary skill in the art to have modified the security of the combination by including intaglio printing to alter the height of the ink and range because as taught by both Ichikawa and Johnson the thickness and thus feel aiding in security measures are affected as cited above. It would have been obvious to one having ordinary skill in the art to have modified the security of the combination by including embossed areas and greater print areas as well being that the combination teaches such areas area modified to affect the amount of security.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAMRA L. DICUS whose telephone number is (571)272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Ruthkosky can be reached on 571-272-1291. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tamra L. Dicus /TLD/
Examiner
Art Unit 1794

/BRUCE H. HESS/

Primary Examiner, Art Unit 1794